



OKLAHOMA AGRICULTURAL EXPERIMENT STATION

STILLWATER

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BERMUDA

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Agronomist

In the greater portion of this State Bermuda is the only grass which can be successfully grown. Hundreds of different tests with different varieties of grasses have been made at the Experiment Station and at other points in this State trying to find other varieties of grasses suitable for the conditions which prevail in Oklahoma. As a result of these experiments and the many reports which have been received from farmers throughout the State, the conclusion has been drawn that Bermuda is the best grass for Oklahoma. Orchard grass, timothy and clovers succeed to some extent in the northeastern and in the eastern portions of the State. Blue grass is also fairly successful in this section, but the areas where these grasses can be grown is very limited.

Bermuda does not succeed very well in the extreme northwestern portion of the State. The only grasses which seem to do well there are the native prairie grasses.

Japan clover may be successful as a pasture grass in the southeastern portion of the State.

Colorado grass gives some promise of being a success in the western portion of the State, and a few farmers have reported highly profitable returns from this crop. The real agricultural value of Colorado grass for Oklahoma has not yet been fully determined.

Alfalfa, which is a legume, should be grown in preference to Bermuda wherever its growth is successful. It is far more valuable as a hay plant than Bermuda, and is just as profitable as a pasture crop.

Johnson grass grows well in most parts of the State. It makes a very fine quality of hay, and is also very valuable as a pasture. Johnson grass is a very dangerous plant to introduce on one's farm, especially on rich bottom land and along rivers. Its introduction and growth is prohibited by law.

Use of Bermuda.—Bermuda is now grown to some extent in nearly every county in Oklahoma. We do not recommend it for the Panhandle counties or a little part of the northwestern portion of the State. It has proved of great value as a pasture grass. It is especially valuable to pre-

vent soil erosion and for pasture on rough land not well suited to general agriculture. Bermuda does not rank high as a hay producer, but the hay produced is of good quality. Bermuda makes a fine lawn grass.

What to Plant.—Plant only the roots. Do not use seed. Seed sold on the market is of very low vitality. Seed is grown only in the South, where the plants are not subjected to cold weather, hence the plants grown from seed are not as hardy as those now grown in this State. It is almost impossible to get a satisfactory stand when seed is used.

Varieties.—We are growing only one variety of Bermuda. It contains several types, but these have never been selected to pure strains, although extensive work is being done along this line at the present time.

Seedbed.—It will pay to thoroughly prepare the seedbed for Bermuda. Prepare as you would for corn or cotton.

Time of Planting.—The best time to plant Bermuda is from May 1 to June 15. An ideal time is just after a heavy rain.

Method of Planting.—Use from four to eight sacks of roots per acre. There are many good methods of planting. Some of the leading ones are as follows:

1. Furrow out in rows with the single-shovel and plant as you would potatoes. Cover either with a hoe or the foot.
2. Drop in every second or third furrow following a plow which is run two or three inches deep.
3. List the field, scatter roots in listed furrows and cover with a disk harrow.

Where to Plant.—Start your Bermuda on rough land where you wish a permanent pasture. Do not grow Bermuda when alfalfa and similar crops can be successfully produced. It does best on a sandy loam.

Eradicating Bermuda.—Bermuda is not difficult to eradicate in the northern half of Oklahoma. Plow it in the winter and allow the roots to be exposed to the freezing weather. Disk thoroughly in February and seed to oats or any other crop that will thoroughly shade the ground.

Amount to Secure.—When starting Bermuda we advise that you secure only a small quantity. Bermuda is perishable, and therefore must be shipped by express. This makes it rather expensive when a shipment is for any great distance. You can easily increase your acreage from your sod, hence you can soon have as large an acreage as desired when starting in a small way. The work can be done when the conditions are favorable and when labor might otherwise be idle.

A great many people in this State are prepared to make shipments of Bermuda grass roots. By watching the different agricultural papers and other papers where advertisements may appear, one can easily get in touch with the best sources of Bermuda grass. The Station is not prepared at

this time to make any shipments, but the Department of Animal Husbandry of the College will send "shaken" roots to citizens ordering same and sending \$1.00 per two-bushel sack, f. o. b., Stillwater. The College prefers to limit shipments of Bermuda grass roots to two sacks to each party ordering, as it is impracticable to fill large orders and supply promptly the hundreds of citizens requesting shipments of these roots annually. The College and Experiment Station will also supply names of farmers growing Bermuda grass roots and offering them for sale.

It is very costly to make a start with Bermuda grass. For this reason it is best to begin in a small way. The sodding down of the first acre will probably cost close to \$10.00. If the further increase is made from one's own field, the sodding down of an acre need not be more costly than the seeding of any of our common field crops. This item of expense, however, should always be given consideration, and the starting of Bermuda should be begun on a small area.

Improving the Stand.—If the Bermuda is thin, it can be plowed and harrowed, or scattered in the same way as when first started, and the stand will be much improved. It is not necessary to plow the whole field, but only the thin portions.

Warning.—Do not allow chickens or hogs on the newly started lawn or field. These animals will eat the roots as well as the stems, and will completely kill the plants unless they are allowed to get a good start. After the lawn or pasture is started the animals may be turned on without any danger of injury.



BERMUDA SOD SHAKER

The cut shows a simple, inexpensive, homemade machine used to shake the dirt from the sod in preparing Bermuda shipments. The sod is plowed about three inches deep and the dirt is shaken out with this machine. Any one can build such a machine and the total cost need not exceed \$15.00.

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The following are available publications of the Oklahoma Agricultural Experiment Station:

- No. 66—The Water Supply.
- No. 67—Miscellaneous Water Analyses.
- No. 69—Small Fruits.
- No. 72—Tests of Dips as Lice and Tick Killers.
- No. 75—A Study of the Bacterial Content of Cream.
- No. 87—Corn Culture.
- No. 88—Southern Plum Aphis.
- No. 89—Chemistry of the Kafir Corn Kernel.
- No. 90—A Study of Bermuda Grass.
- No. 91—The Twig Girdler.
- No. 92—Spray Calendar.
- No. 93—Artificial Insemination.
- No. 94—Hog Feeding.
- No. 95—Varieties of Fruits Raised in Oklahoma.
- No. 96—Vitality of Reproductive Cells.
- No. 97—Cotton Culture.
- No. 98—Cotton or Melon Aphis.
- No. 99—Some Results Obtained in Feeding Dairy Cows.
- No. 100—Garden and Truck Crop Insect Pests.
- Circular No. 6—The Bactericidal Properties of Various Disinfectants.
- Circular No. 7—The Value of Cotton Improvement.
- Circular No. 12—Summary of Experiment Station Work.
- Circular No. 13—Selecting an Orchard Site.
- Circular No. 14—Protecting Trees From Rabbits.
- Circular No. 15—Some Types of Silos.
- Circular No. 18—Experiment Station Work.
- Eighteenth Annual Report.
- Nineteenth and Twentieth Annual Report.
- Twenty-First Annual Report.